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2771-605

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Application of:	)	Docket No.:	2771-605 (7486)
Applicants: ROEDER, Jeffrey F. et al.	)	Conf. No.:	3324
Application No.: 10/643,110	)	Art Unit:	2825
Date Filed: August 18, 2003	)	Examiner:	ROCCHEGIANI, Renzo
Title: PRECURSOR COMPOSITIONS AND PROCESSES FOR MOCVD OF BARRIER MATERIALS IN SEMICONDUCTOR MANUFACTURING	)	Customer No.:	25559

**FACSIMILE TRANSMISSION CERTIFICATE****ATTN: Examiner Renzo ROCCHEGIANI****Fax No. (703) 872-9306**

I hereby certify that this document is being filed in the United States Patent and Trademark Office, via facsimile transmission to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 29, 2004, to United States Patent and Trademark Office facsimile transmission number (703) 872-9306.

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Number of Pages (including cover)



Marianne Fuierer

June 29, 2004

Date

**RESPONSE TO RESTRICTION REQUIREMENT IMPOSED IN JUNE 15, 2004 OFFICE  
ACTION IN U.S. PATENT APPLICATION NO. 10/643,110**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

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In the June 15, 2004 Office Action, the Examiner imposed a restriction requirement against claims 1-49, and required that an election be made between:

Group I: Claims 1-31 and 49, drawn to a method of forming a nitride, classified in class 438, subclass 758; and

Group II: Claims 32-48, drawn to a precursor, classified in class 524, subclass 86.

**Applicants hereby elect, with traverse, Group II claims 32-48, drawn to the precursor.**

The traversal is based on the fact that the rationale for restriction is in error. The Office Action states that "the product as claimed may be used for a materially different process. For example, it may be used to form a material via a liquid deposition as opposed to chemical vapor deposition" (see page 2 of the Office Action).

In fact, the precursor recited in claim 32 is the same as that recited in method claim 1, insofar as the specifically recited substituents of the precursor is concerned, and thus is not independent and distinct from claim 32, as is necessary under 35 U.S.C. §121 as a basis for proper restriction. It therefore is requested that the restriction requirement be reconsidered.

In addition, in the June 15, 2004 Office Action, the Examiner imposed an additional election requirement against Group I claims 1-31 and 49, and required that an election be made between:

Species I: Claims 1-21, corresponding to a method of forming a nitride using a precursor comprising  $(R_1R_2N)_{a-b}MX_b$ ; and

Species II: Claims 22-31 and 49, corresponding to a method of forming a nitride using a precursor comprising  $R_mR'_nSiH_yX_{4-(m+n+y)}$ .

**Applicants hereby elect, with traverse, Species I, which corresponds to the method of forming a nitride using a precursor comprising  $(R_1R_2N)_{a-b}MX_b$ , as recited in claims 1-21.**

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It is understood that upon allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all of the limitations of an allowed generic claims, as provided by 37 C.F.R. §1.141.

Applicants acknowledge the withdrawal of non-elected species claims 22-31 and 49.

If the restriction requirement is reconsidered but nonetheless made final, applicants alternatively request rejoinder of method claims 1-21 (corresponding to Species I) under the provisions of MPEP §821.04 upon confirmation of allowable subject matter of the Group II claims 32-48.

Such rejoinder would be fully proper under these circumstances for the following reasons.

When an application as originally filed discloses a product and the process for making and/or using such product, and only the claims directed to the product are presented for examination, when a product claim is found allowable, applicant may present claims directed to the process of making and/or using the patentable product for examination through the rejoinder procedure in accordance with MPEP §821.04, provided that the process claims depend from or include all the limitations of the allowed product claims.

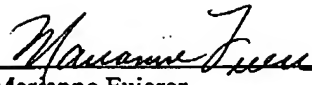
In the present application the elected claims 32-48 are directed to a metallorganic precursor comprising  $(R_1R_2N)_{a-b}MX_b$  and claims 1-21 (elected species I) are directed to a process for forming a nitride material on a substrate using said metallorganic precursor. Consistent with the provisions of the MPEP §821.04, when the product claims 32-48 are subsequently found allowable, the withdrawn method of use claims 1-21 may be rejoined for examination.

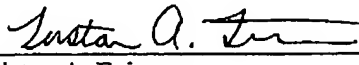
### Conclusion

Based on the foregoing, claims 1-21 and 32-48 are in form and condition for examination. If any additional issues remain, the Examiner is requested to contact one of the undersigned attorneys at (919)419-9350 to discuss same.

Respectfully submitted,

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